Association of American State Geologists

MARYLAND DEPARTMENT OF NATURAL RESOURCES

United States Geological Survey

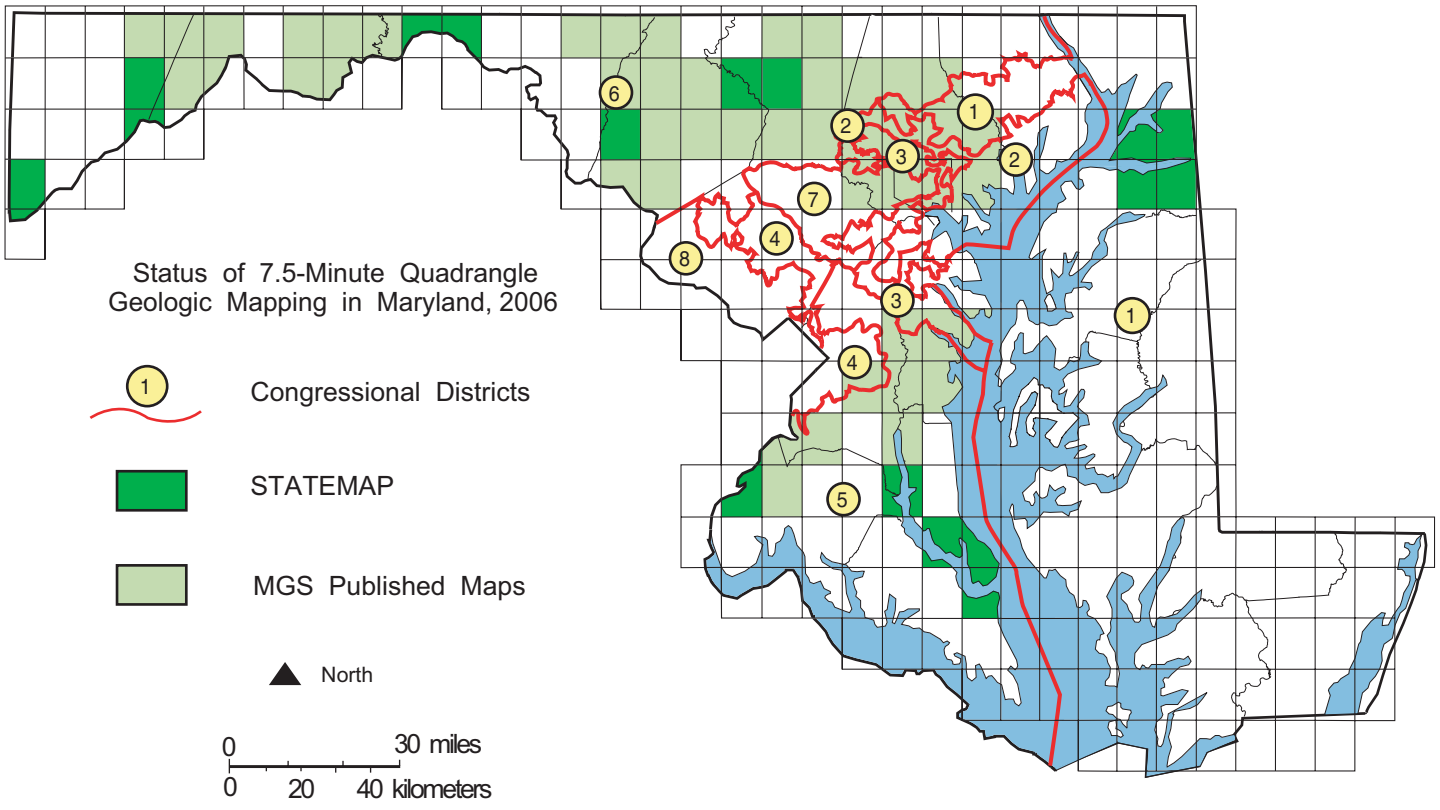
USGS science for a changing world

Environmental Geology and Mineral Resources
Maryland Geological Survey
Maryland Department of Natural Resources

National Cooperative Geologic Mapping Program

STATEMAP Component: States compete for federal matching funds for geologic mapping

Maryland



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SUMMARY OF STATEMAP
GEOLOGIC MAPPING PROGRAM IN MARYLAND

Federal Fiscal Year	Project Title	Federal Dollars	State Dollars	Total Project Dollars
99	Maryland STATEMAP	$24,900	$24,900	$49,800
00	Maryland STATEMAP	0	0	0
01	Maryland STATEMAP	68,380	71,980	140,360
02	Maryland STATEMAP	100,000	122,425	222,425
03	Maryland STATEMAP	39,653	41,448	81,101
04	Maryland STATEMAP	76,208	77,092	153,300
05	Maryland STATEMAP	73,424	76,407	149,831
06	Maryland STATEMAP	82,209	100,259	182,468
Totals		$464,774	$514,511	$979,285

In FY 2000, the Environmental Geology and Mineral Resources Program took the lead in implementing a new MGS policy to produce only digital geologic maps. Starting with FY 2001, the STATEMAP part of the National Cooperative Geologic Mapping Program (NCGMP) has significantly enabled MGS to initiate the production of digital geologic maps, to begin clearing a backlog of unpublished quadrangle maps, and to keep pace with mapping in progress.

From FY 2001 through 2003, STATEMAP has supported production of digital geologic maps for previously completed, but unpublished quadrangles: Davis, Table Rock, Barton, and Westernport quadrangles (coal fields in Western Maryland); Hancock, Cherry Run, Big Pool quadrangles (Allegany and Washington Counties); Indian Head and Benedict quadrangles (parts of growth area for Washington, D.C. in Southern Maryland). In FY'03 STATEMAP also supported production of a digital, slightly revised version of the 1978 USGS New Windsor quadrangle geologic map (a major sinkhole geohazard area) and new mapping of the Earleville and Spesutie quadrangles (a hydrologically sensitive recharge area for aquifers on the northern Eastern Shore).

In FY 2004 STATEMAP funded new mapping and digitization of the Cecilton quadrangle – an extension of the Earleville-Spesutie project - to help determine the extent of faulting in the area, refine the stratigraphy, and provide baseline data relative to water and mineral resources. STATEMAP also supported the revision and digitization of the Middletown quadrangle geologic map, which had been open-filed as a blueline map in 1994, but is significant in that the area in western Frederick County is one of increasing population pressures, as the Middletown Valley is a growing bedroom community for the Washington-Baltimore Metropolitan Area.

In FY 2005, STATEMAP supported geologic mapping and drilling in the Galena quadrangle on Maryland's Eastern Shore and the preparation for GIS of a revised version of the previously published geologic map of the Union Bridge quadrangle, which was an extention of STATEMAP-supported digitizing geologic maps in sinkhole-prone areas of Maryland's Piedmont.

In FY 2006, STATEMAP is supporting geologic mapping and drilling in the Millington quadrangle, which lies immediately east of the Galena quadrangle. This is a continuation of projects supported by STATEMAP on the Upper Eastern Shore in FY 2004-2005.

Various agencies in State and local government have utilized our digital geologic maps. For example, Maryland's Power Plant Assessment Program found the Table Rock-Davis map very useful in determining coal crop lines, planning deep mine restorations with power plant combustion products, and locating potential sites for wind power plants. Also, the Water Resources Planning Division of Carroll County government can now incorporate its sinkhole database into the GIS structure of the New Windsor quadrangle geologic map, along with the upcoming digital geologic map of the Union Bridge quadrangle.

January 2006